2011-04-11 Monday Morning Notes

Monday, April 11, 2011 7:28 AM

Stacking and Transfers

- Stacked 25.1mA/hr with a production of 20.9 pbars/Mp with 8.04 Tp on target.
- Unstacked 1513E10 (504/day) in 185 transfers(62/day) over 60 sets (20/day) with an average overall efficiency of 96.4%

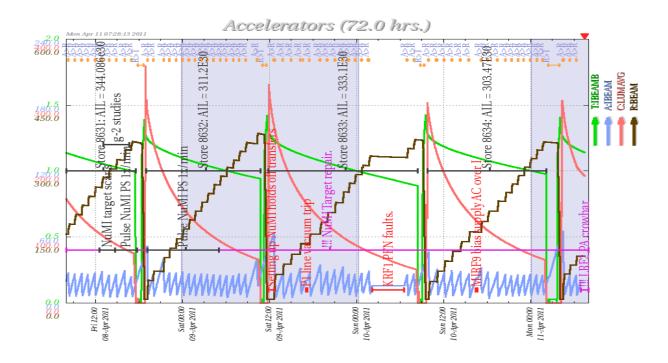
Operational Happenings

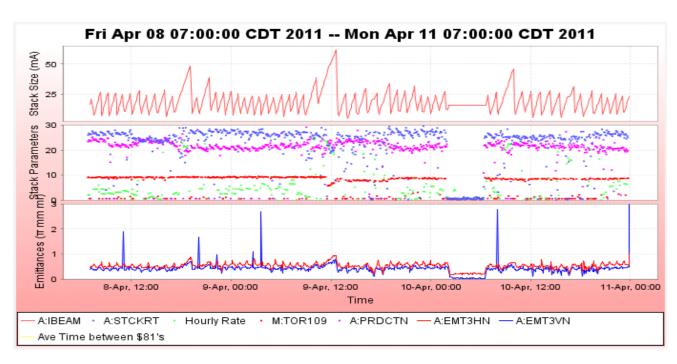
- Saturday went from \$29s to \$23s as NuMI turned back on after a long period of downtime. A look at the transition to \$23s was done here http://www-bd.fnal.gov/cgi-mach/machlog.pl?nb=pbar11 &action=view&page=68&anchor=223655&hilite=22:36:55-.
 - O Down about 1.5mA/hr on \$23s at 2.2 seconds compared to \$29s at 2.4 seconds.
- Dump water leak started up again (ttp://www-bd.fnal.gov/cgi-mach/machlog.pl?nb=pbar11 &action=view&page=68&anchor=083605&hilite=08:36:05-)
 - Made up 7 times in 24 hours on Saturday!

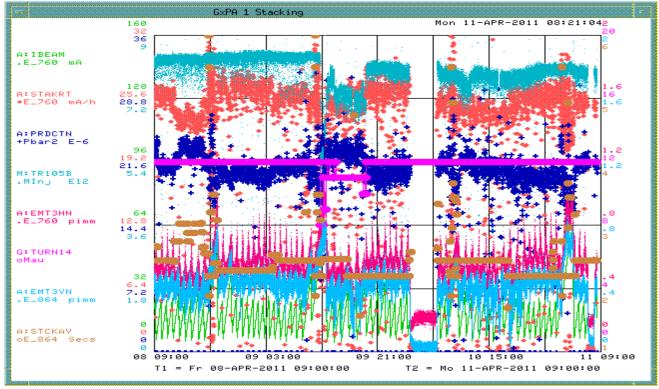
Numbers

- Stacking
 - Pbars stacked: 1543.09 E10Time stacking: 66.51 Hr
 - o Average stacking rate: 23.20 E10/Hr
- Uptime
 - Number of pulses while in stacking mode: 99605
 - Number of pulses with beam: 92947Fraction of up pulses was: 93.32%
- The uptime's effect on the stacking numbers
 - o Corrected time stacking: 62.07 Hr
 - Possible average stacking rate: 24.86 E10/Hr
 - Could have stacked: 1653.62 E10/Hr
- Recycler Transfers
 - o Pbars sent to the Recycler: 1516.14 E10
 - Number of transfers: 186Number of transfer sets: 61
 - o Average Number of transfer per set: 3.05
 - Time taken to shoot including reverse proton tuneup: 00.65 Hr
 - o Transfer efficiency: 95.82%
- Other Info
 - o Average POT: 8.01 E12
 - o Average production: 20.73 pbars/E6 protons

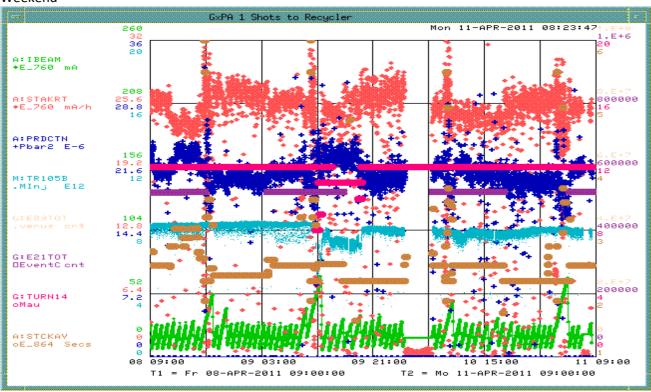
Plots



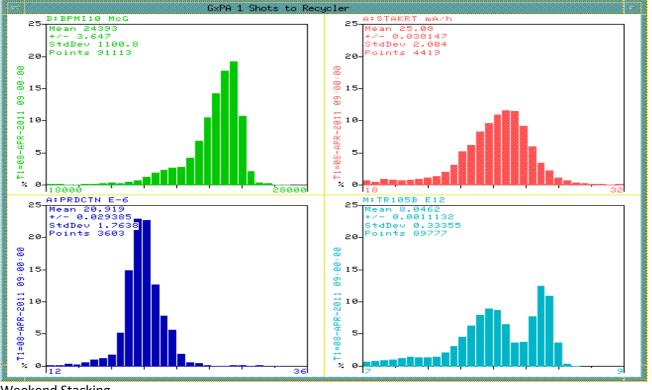




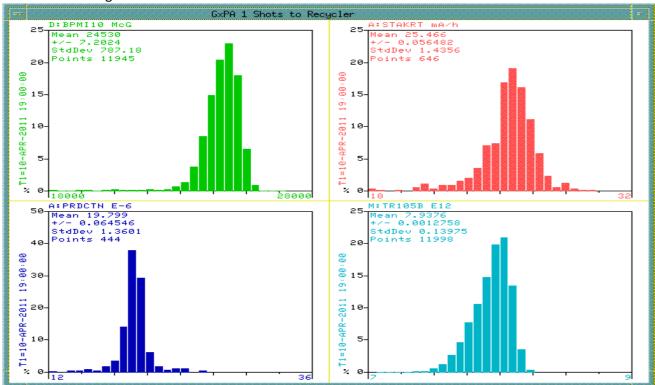
Weekend



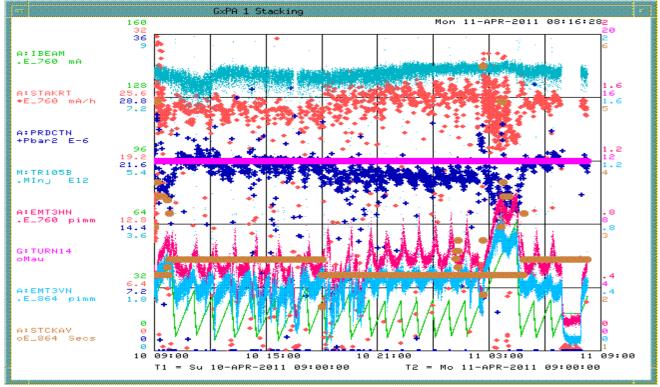
Weekend



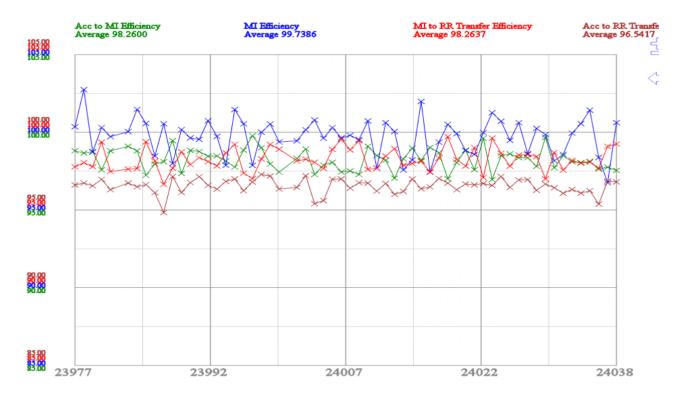
Weekend Stacking



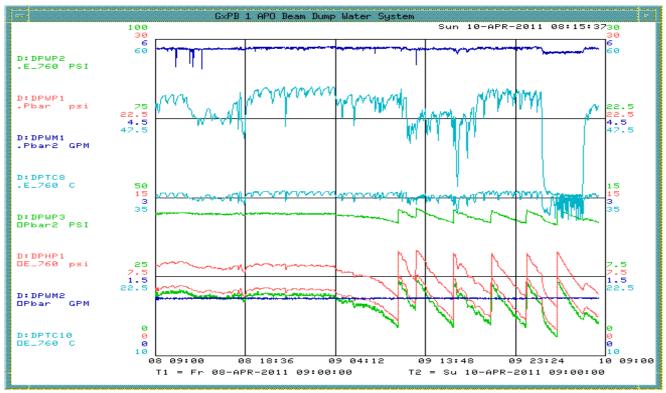
\$23's, no SY120. Down about 1.5mA/hr



24 hours



Culum n 1 Humb er_0_ Pber Trenrf er Shut	Caluma 4 Humbor_3_Tran	Culum n 21 Humb or_20 _A:IB EAMB rumpl od un \$91 (A:BE	Culum n 22 Humb or_21 _A:IB EAMB rempl od un \$94 (A:BE	Unrteck ed (mÅ)	Culum a 23 Humb or_22 _R:BE AMS (R:BE AMEO[0])	Culum a 24 Humb or_23 _R:BE AM (R:BE AMEO[1])	Sterhod	Acc tu RR Eff	Acc to MI Eff	Accts MI2 Eff	Acc to MI * Acc to MI2 Efficien cy	Tre arf err	Sat	Calem n 5 Hembo r_4_Ac c Herize ntel Emitte	Culum n 6 Humb er_5_ Acc Vertic el Emitt ence	Calum n # Humb or_7_ Acc Lungit udinal Emitt anco	
	Totals =>				1513.16			1458.10	96.36%	98.23%	97.93%	96.19%	185	60	5.485	4.08	1.98
	Daily Average =>				504.39			486.03					62	20			
24038 24037	Manday, April 11, 2011 Manday, April 11, 2011	6:17 5:24	_	6.99 6.79	21.41	85.97 65.81	106.53 86.19	20.74 20.57	96.882 96.902	97,48% 97,91%	97.34% 95.09%	94,89% 93,11%	3		5.442 5.605	3.789 4.125	_
24036	Manday, April 11, 2011	4:28	65.46	7.38	62.70	8.13	66.38	59.53	94.94%	97.55%	96,21%	93,85%	5		6.775	4.893	1.912
24035	Manday, April 11, 2011	1:40	_	7.22	20.83	347.03	366.68	20.05	96.23×	97.76%	99,29%	97.06%	3	_	5.949	4.405	_
24034 24033	Manday, April 11, 2011 Sunday, April 10, 2011	0:50 23:58	25.90 26.08	7.38 6.88	21.12	328.08 308.47	347.97 328.99	20.28 20.92	96.05× 96.24×	98.37% 98.22%	98,39% 98,31%	96,78% 96,56%	3	-	5.962	4.253	1.987
24032	Sunday, April 10, 2011	23:05	_	6.78	21.02	289.43	309.25	20.19	96.05%	98.29%	97.26%	95.60%	3	-	5.963	4.331	_
24031	Sunday, April 10, 2011	22:15	_	6.70	21.29	270.07	290.21	20.52	96.40%	97.66%	96,33%	94.07%	3	-	6.03	4.282	
24030 24029	Sunday, April 10, 2011 Sunday, April 10, 2011	21:23	25.27 25.92	6.40 7.24	21.16 21.16	250.84 231.37	270.91 251.42	20.44 20.35	96.54× 96.14×	99.29% 97.82%	99,04% 98,36%	98,34% 96,21%	3	_	5.648 5.631	4.136 4.17	1.995 2.017
24028	Sunday, April 10, 2011	19:27	28.28	5.92		208.83	231.87	23.41	97.00%	98.32%	96,80%	95,18%	3	_	5.385	3.734	_
24027	Sunday, April 10, 2011	18:09	28.21	4.16	25.18	185.41	209.40	24.35	96.73%	98.34%	98,97%	97,32%	3	-	4.439	2.777	_
24026 24025	Sunday, April 10, 2011 Sunday, April 10, 2011	17:11 15:31	31.83 26.37	8.69 5.06	25.77 23.23	161.29 139.51	185.79 161.74	24.87 22.55	96.52× 97.04×	98,48% 98,62%	98,05% 98,65%	96,56% 97,29%	3	_	5.541 4.875	4.089 3.28	_
24024	Sunday, April 10, 2011	14:22	28.60	7.06	24.12	116.94	139.83	23.26	96.44×	97.27%	98.31%	95.62%	3	-	5.527	3.836	_
24023	Sunday, April 10, 2011	13:12	27.28	6.78	23.13	95.19	117.23	22.36	96.692	99,43%	99,31%	98,75%	3	1	5.279	4.149	2.012
24022	Sunday, April 10, 2011	12:07	27.98	5.54	24.16	72.46	95.49	23.31	96.492	97.59%	96,62%	94.29%	3	-	4.625	3,625	_
24021 24020	Sunday, April 10, 2011 Sunday, April 10, 2011	11:08 9:57	30.65 46.43	7.85 7.11	25.40 43.02	48.50 8.61	72.72 49.22	24.52 41.31	96.53× 96.01×	98,46% 98,40%	97.91× 98.35×	96,40% 96,77%	4	,	5.592 5.715	4.139 4.223	_
24019	Sunday, April 10, 2011	7:56	26.77	7.49	21.97	350.82	371.62	21.25	96.71×	97.24%	97.54%	94.85%	3		5.368	3.945	_
24018	Sunday, April 10, 2011	7:00	25.78	6.61	21.66	330.90	351.58	21.01	97.03×	98,95%	98,25%	97.22%	3	-	5.013	3,617	_
24017 24016	Sunday, April 10, 2011 Sunday, April 10, 2011	1:44 0:43	_	8.31 9.28	23.87 23.10	312.23 291.68	334.63 313.35	23.02	96.45× 96.29×	98.75% 98.24%	96,48% 99,53%	95,27% 97,78%	3	-	5.703 5.722	4.287 4.262	2.007 2.013
24015	Saturday, April 09, 2011	23:48	25.97	6.40	21.72	271.86	292.50	21.05	96.442	98.87%	97.27%	96,17%	3		5.372	3.937	1.978
24014	Saturday, April 09, 2011	22:56	26.31	7.21	21.64	252.06	272.56	20.82	96.22%	98.20%	96,79%	95,05%	3	-	5.876	4.095	_
24013 24012	Saturday, April 09, 2011 Saturday, April 09, 2011	22:09 21:01	33.03 30.42	9.36 8.35	26.26 24.52	228.05 205.62	252.76 228.85	25.19 23.68	95.92× 96.56×	97.37% 98.03%	97.29% 98.54%	94.73% 96.59%	3	-	5.88	4.759	1.985 1.989
24011	Saturday, April 09, 2011	20:00	_	7.28	24.19	183.34	206.22	23.23	96.04×	98.55%	96.35%	94.95%	3	-	5.416	4.122	1.981
24010	Saturday, April 09, 2011	19:02	34.40	8.06	28.91	156.32	183.85		96.76×	99,32%	99,05%	98,38%	3	_	5.321	3.898	1.954
24009 24008	Saturday, April 09, 2011	17:33 16:15	27.33 31.39	6.22 7.88	23.40 26.00	134.60 110.39	156.84 135.02	22.61 25.03	96.62× 96.27×	96,95% 97,49%	96,87% 96,95%	93,91% 94,52%	3	-	4.965 5.603	3.743 4.34	1.933 1.976
24007	Saturday, April 09, 2011 Saturday, April 09, 2011		27.01	5.19		87.98	110.70	23.03	96.792	97.47%	96,93%	94.47%	3	-	4.777	3,434	=
24006	Saturday, April 09, 2011	13:51	27.22	4.63	24.47	64.71	88.19		96.972	98,42%	98,00%	96,45%	3		4.313	3.288	_
24005	Saturday, April 09, 2011		63,13	5.48	61.47	8.27	65.14 386.26	58.27		97.54%	97.21%	94.82%	5		6.299	4,573	1.921
24004 24003	Saturday, April 09, 2011 Saturday, April 09, 2011	10:18 8:45	_	15.73 5.67	25.86 22.83	362.04 343.72	365.25	24.67 22.15	95.39x 97.03x	97.26% 98.90%	97,90% 98,63%	95.21% 97.54%	3	_	5.052	3.861	1.893 1.948
24002	Saturday, April 09, 2011	7:51	26.94	6.96	22.75	324.01	345.46	21.96	96.54%	98,67%	97.31%	96,01%	3	_	5,492	4.121	1.978
24000	Saturday, April 09, 2011					_	_				98,682	96,82%	3	_	5.345		_
23999 23998	Saturday, April 09, 2011 Saturday, April 09, 2011		_	4.91 6.08	22.12 21.58	287.58 268.32	308.57 288.86	21.49 20.96	97.14z 97.14z	98.23% 98.87%	98.07% 98.86%	96.33% 97.75%	3	_	4.92 5.513	3.714 4.104	_
23997	Saturday, April 09, 2011		_		21.95		269.39	21.27	96.902	99.55%	97.67%	97.23%	3	_	5.502	4.073	_
23996	Saturday, April 09, 2011		25.93	7.03		228.87	249.41	20.89		99.04%	99,27%	98,32%	3	_	5.862	4.499	
23995 23994	Saturday, April 09, 2011 Saturday, April 09, 2011		26.32 25.74	6.68	22.32 21.66	208.45 188.66	229.66 209.28	21.67 20.99	97.092 96.902	97.94% 98.23%	98,60% 97,14%	96,57% 95,42%	3	_	5.765	4.344 4.296	_
23993	Saturday, April 09, 2011		_	7.29			189.30		96.50×	98.48%	98,38%	96,88%	3	-	5.463	4.497	_
23992	Saturday, April 09, 2011		_		24.20	145.77	168.77		96.42×		98,27%	96,43%	3		5.455		_
23991 23990	Friday, April 08, 2011 Friday, April 08, 2011		_	7.48 7.14		124.20 102.90	146.25 124.67	22.31	97.002 96.752	_	98,80% 98,30%	97.23% 97.47%	3		5.565 5.39	4.38 4.211	_
23989	Friday, April 08, 2011		_	9.54		71.82	103.38		96.10×		97.86%	95.43%	3		5.001	4.487	_
23988	Friday, April 08, 2011		_	6.32	22.30	51.27	72.65	21.64	97.02%	99,15%	97.75%	96,92%	3	1	5.381	4.086	1.973
23987	Friday, April 08, 2011			8.20	47.02	8.27	51.78		94.382	97.92%	98.09%	96,06%	4		7.004	5,445	1.924
23986 23985	Friday, April 08, 2011 Friday, April 08, 2011		24.40 29.46	5.77 6.00	21.12 25.78	347.58 324.93	367.35 349.31	20.35 24.91	96.31x	98.51% 97.58%	97.51x 97.71x	96,06% 95,34%	3	_	4.889 5.007	3.94 3.622	_
23984	Friday, April 08, 2011		_	5.59		304.48	326.35	22.28	96.60×	98.85%	100.24%	99.09%	3	_	4.675		1.965
23983	Friday, April 08, 2011		25.31	5.25		284.74	305.87	21.72	96.#2x	98.81%	99,13%	97,95%	3	-	4.486	3.24	
23981 23980	Friday, April 08, 2011 Friday, April 08, 2011		_	6.96 6.64		241.91 221.66	263.81 242.86	22.28 21.58	96.51x	98,99% 97,43%	98,31% 97,92%	97.32% 95.39%	3	_	5.225 5.271	3.944 4.159	_
23979	Friday, April 08, 2011		_			200.69	222.38	22.08	96.72×	98,51%	98.25%	96,78%	3	_	5.354	3.819	_
23978	Friday, April 08, 2011		_			179.15	201.34	22.54		98.78%	100,36%	99,13%	3	_	4.958	3.812	
23977	Friday, April 08, 2011	8:18	27.58	6.59	23.64	156.99	179.59	22.85	96.64%	98,93%	98,58%	97,52%	3	1	5.244	3.986	1.954



Dump water leak